

REMARKS/ARGUMENTS

Applicants have reviewed the Office Action of June 12, 2007. Reexamination and reconsideration of the application is respectfully requested.

A. Claims 1-13 And 17-32 Are Pending In The Application

Applicants gratefully acknowledge the allowance of claims 23-32.

Claims 1, 2, 4-7, 9, 12, 13, 20 and 22 stand rejected based on the newly-applied patent to Velthaus et al., U.S. Patent No. 5,505,986.

Applicants also gratefully acknowledge the indication as to the allowable subject matter found in claims 3, 8, 10-11, 17-19 and 21.

B. Independent Claim 1 Is Now Distinguished From The Cited Art.

In rejecting claim 1, and various ones of its dependent claims, U.S. Patent No. 5,505,986 ('986) is cited for its disclosure of a phosphor layer with the formula $M''M'''_2X_4$: RE where M'' is magnesium, calcium, strontium or barium; M''' is sulfur or selenium and RE is a rare earth activator (see abstract and column 1, line 60 through column 2, line 8). It is disclosed in column 2, lines 38-60 that a suitable insulating dielectric layer is deposited on the top and bottom of the phosphor layer. Additionally, Velthaus discloses that insulators such as AlN can be used as barrier layers. Velthaus also discloses that the rare earth activator can be europium or cerium (see column 2, line 68). Column 3, lines 33-42 of the reference discloses that the multi-source reactive deposition can be multisource sputtering or chemical vapour deposition.

Applicant respectfully submits the focus of the '986 patent is to strontium phosphors and only provides a general statement in column 1, lines 51-60. The '986 patent is in fact not particularly relevant to the concepts of the present application, which is an improved phosphor film for thick film dielectric illuminant displays.

However, to more specifically distinguish and focus the concepts of the present claims, Applicants have amended claim 1 to identify the aluminum nitride barrier layer has a thickness in a range of about 30nm to about 50nm when used in conjunction with the rare earth activated alkaline earth phosphor.

Thus, this language amends claim 1 to add the limitations of the thickness of the aluminum nitride layer only with respect to part 1(a) of the claim, that is, the rare earth

activated alkaline earth phosphor with the recited formula.

This amendment overcomes the outstanding rejection, as the recited range is not taught or fairly suggested in the cited art. Further this limitation is not obvious since no thickness is disclosed in the '986 patent as used for a thin film dielectric display, and as the subject of claim 1 is to a thick film dielectric illuminescence display. The thickness limitation of approximately 30nm to 50nm, again, provides a non-obvious distinction.

CONCLUSION

For the reasons described above, it is respectfully submitted all claims remaining in the application are now in condition for allowance. An early notice to that effect is therefore earnestly solicited.

If there are any issues remaining, the Examiner is encouraged to contact the undersigned in an attempt to resolve any issues. If any fee or extension is due in conjunction with the filing of this amendment, Application authorizes deduction of that fee from deposit account 06-0308.

Respectfully submitted,

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